KEYWORD

GIVEN WORD

03 **ABSTRACTION**

In art, abstraction relates to the formal aspect of art; emphasizing lines, colors, generalized or geometrical forms, etc., especially with reference to their relationship to one another.

ABSTRACTION

SIMPLIFY
to make less complex or complicated; make plainer or easier.

DISENTANGLE
free someone from something that they are entangled with.

REFINE
remove impurities or unwanted elements from a substance.

EXTRACT
to get, pull, or draw out, usually with special effort, skill, or force / deduce.

MINIMAL
barely adequate or the least possible / stripped off all unnecessary details.

BASIC
of, relating to, or forming a base; fundamental:

ESSENTIAL
absolutely necessary; indispensable:

ELEMENTAL
forming an essential or typical feature; fundamental.

PRIMARY
of chief importance; principal or the earliest in time or order.

GEOMETRIC
of or relating to painting, sculpture, or ornamentation of predominantly geometric characteristics.

VARIATION
a different or distinct form or version of something.

DIVIDE
separate or be separated into parts base upon features.

ESSENCE
the basic, real, and invariable nature of a thing or its significant individual feature or features:

CRUX
the decisive or most important point at issue.

CORE
the central, innermost, or most essential part of anything.

HEART
the central or innermost part of something; source of life.

CONCLUSION

OF KEYWORD

03 **ABSTRACTION**

Abstraction is a process of **refinement**. By extruding only the **essentials** and removing all that is excessive or unnecessary, the **heart** of the object is revealed. This process gathers what is of true **essence**, and expresses it in a **minimal** manner.

KEYWORDS

SELECTED WORDS

3.1 **MINIMAL**

Minimal refers to something or someone being barely adequate or at its least possible state. This is often showcased by reducing something to its primary form; by stripping off all unnecessary details and leaving behind basic, fundamental components.

3.2 **ESSENCE**

Essence is the intrinsic nature or indispensable quality of something. It is a significant aspect/feature of an individual or an object that cannot be replaced or removed. Like a heart, it beats character and flavour into the various systems which depend on it for life.

MINIMAL

MINIMIZE

reduce something to the smallest possible amount or degree.

REDUCE

make smaller or less in amount, degree, or size.

CONDENSE

make (something) denser or more concentrated.

DISTIL

to extract the essential elements of; refine; abstract:

REMOVE

a person or thing acting or serving in place of another.

ELIMINATE

completely remove or get rid of (something).

EXPEL

force (someone or something) to leave a place.

DETACH

to unfasten and separate; disengage; disunite.

BELITTLE

dismiss (someone or something) as unimportant.

DEFLATE

bring about a general reduction; size, feeling or value.

BASIC

of, relating to, or forming a base; fundamental:

ESSENTIAL

absolutely necessary; indispensable:

MINIMUM

the least or smallest amount or quantity possible, attainable, or required.

SIGNIFICANT

great or important, having a particular meaning; indicative of something.

SYMBOLIC

serving as a representation or is something that has a greater meaning because of what it represents.

ELEMENTAL

forming an essential or typical feature; fundamental.

PRIMARY

of chief importance; principal or the earliest in time or order.

CONCLUSION

OF KEYWORD

3.1 **MINIMAL**

Minimal refers to a process of **minimizing** something or someone to its least possible state. This can be done by **reducing** something through **condensing**; making it denser and more concentrated. Or it can also be achieved by stripping off all unnecessary details and leaving behind the bare **minimum**; **basic** components in its smallest amount possible.

TYPES OF CONDENSE

RESEARCH RECAP:

ABSTRACTION

MINIMAL

minimizing something or someone to its least possible state.

CONDENSE

make (something) denser or more concentrated.

CONCLUSION

Condense can be applied in many areas. It involves the reduction of what is unnecessary through shortening or compressing to reveal its main components. This procedure can often be physical or non-physical.

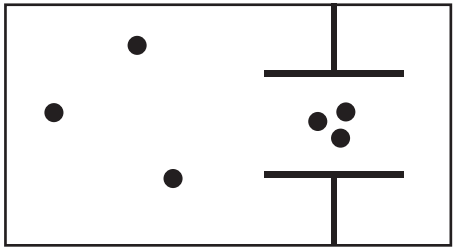
By getting rid of all redundancies, what remains behind is nothing but the bare essentials; its most minimal state.

What was once in excess and surplus is now stripped down to its most important or "true essence". This often appears to be more refine than it used to be, hence can be considered to be abstracted.

CONDENSE IN SPACE

(Physical)

Condense in space is to reduce and shorten the space or distance between particles. An external force compresses particles together to make something more dense than before. A good example of this is the compression of gas particles via a syringe.



CONDENSE IN FOOD

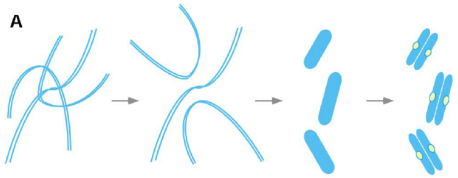
(Physical)

Condensed Food are any type of food that has been processed to remove a portion of the liquids contained within the food item, providing a thicker consistency. Condensed contents can be reconverted to its original state or used to create something different.

CONDENSE IN DNA

(Physical)

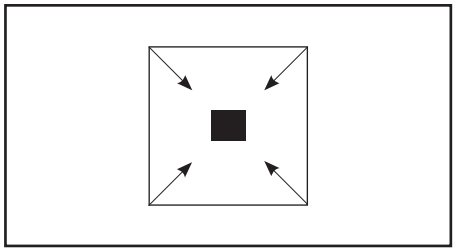
Condense in DNA is when excessively elongated chromatin fibers are refined through a series of folds. It is organized into rod-shaped structures that are compact and dense. These structures have also been minimised to their least possible state; small and basic.



CONDENSE IN FORM

(Physical)

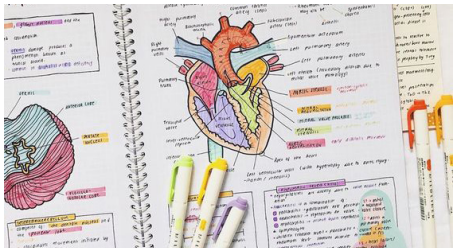
Condense in form is to physically reduce the volume of an object, to make it compact and minute. A condensed form decreases in size hence occupies less space than before, but in contrast, condensed forms increase in concentration.



CONDENSE IN SYLLABUS

(Non-Physical)

To condense in syllabus refers to the process of note making. This is not about writing down everything you hear or read. By taking notes, the writer records only the essence of the information, condensing relevant information into a list of key learning pointers.



CONDENSE IN TEXT

(Non-Physical)

Condense in text is to reduce a book, speech, statement, or the like (textual), to a shorter form. It is to understand the crux of the message and reduce it into a summary or abridge.

Eg. Text above:

Summary

Condense in amount is to reduce text to shorter forms by grasping the main point.

TYPES OF CONDENSE

RESEARCH RECAP:

ABSTRACTION

MINIMAL

minimizing something or someone to its least possible state.

CONDENSE

make (something) denser or more concentrated.

CONDENSE IN SPACE

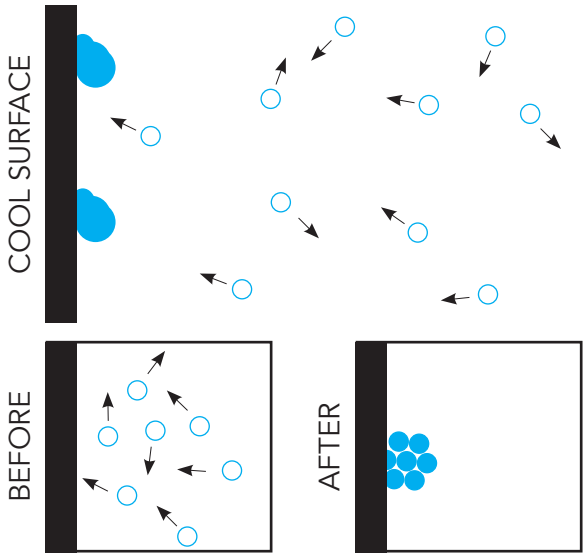
to reduce and shorten the space or distance between particles/objects.

CONCLUSION

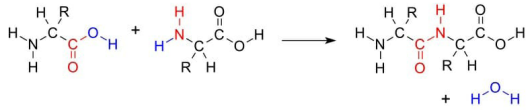
Condense can be applied in many areas. It involves the reduction of what is unnecessary through shortening or compressing to reveal its main components. Condense in space can be regarded as the reduction of space between two things. By compressing these 'unecessary' spaces to its least possible state, new minimal forms can be created.

CONDENSATION

Condensation is the random coagulation of high energy water vapour particles on a cool surface. This process strips away the high energy and creates water molecules that are low in energy and tightly bond together



CHEMICAL REACTIONS



A condensation reaction occurs when two compatible molecules attract and react to form a larger molecule. In the process, this releases a smaller molecule that is no longer needed and is considered redundant/by-product.

TYPOGRAPHY

Condensed Typography

In graphic design, condensed typography is a style and unique typeface. The letters are elongated and squished narrowly. Tracking is almost negligible, and the typeface oftens comes in uppercase only.

Other Examples:

Barlow Condensed Thin:

ABCDEFGHIJKLM
NOPQRSTUVWXYZ

Akzidenz-Grotesk Condensed:

ABCDEFGHIJKLM
NOPQRSTUVWXYZ

TYPES OF CONDENSE

RESEARCH RECAP:

ABSTRACTION

MINIMAL

minimizing something or someone to its least possible state.

CONDENSE

make (something) denser or more concentrated.

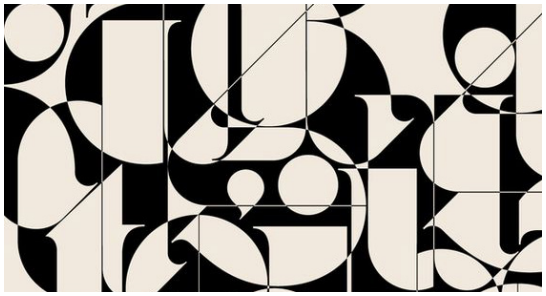
CONDENSE IN SPACE

to reduce and shorten the space or distance between particles/objects.

CONCLUSION

Condense can be applied in many areas. It involves the reduction of what is unnecessary through shortening or compressing to reveal its main components. Condense in space can also be regarded as the complete reduction of space. By superimposing or pleating, these forms are compressed even further; surpassing the "least possible state".

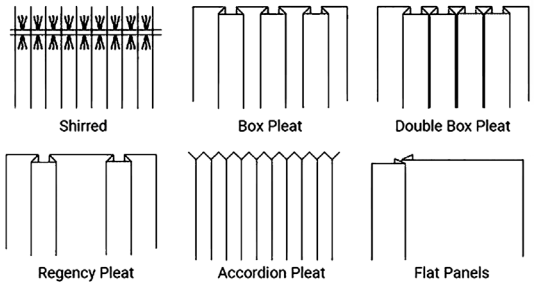
GRAPHIC DESIGN



In graphic design by condensing the spaces completely between different or similar graphic forms, we end up with new designs that overlap one another. This makes for interesting patterns and shapes.

PLEATING

A pleat or plait is a type of fold formed by doubling fabric back upon itself and securing it in place. It is commonly used in clothing and upholstery to gather a wide piece of fabric to a narrower circumference.



The concept of pleating layers and tucks away excess fabric that is unecessary and reveals a condensed pattern that is minimal and clean.

LINKING BACK

TO KEYWORDS

CONDENSE IN SPACE

Condense can be applied in many areas. It involves the reduction of what is unnecessary through shortening or compressing to reveal its main components. Condense in space can be regarded as the reduction of space between two things. By compressing these 'unecessary' spaces to its least possible state, new minimal forms can be created, however it can also be regarded as the complete reduction of space. By superimposing or pleating, these forms are compressed even further; surpassing the "least possible state".

MINIMAL

It can be considered minimal as the process involves minimizing space to its least possible state, causing the subjects to be closer to one another and hence, denser and more concentrated. When condense in space is taken to the extreme (with all spaces being completely removed) this is also considered minimal as what is left is the bare minimum and at its smallest amount.

ABSTRACTION

The process involves removing everything unnecessary and leaving behind only what is essential. When condense in space is taken to the extreme, the process focuses solely on revealing a subject's main components, it's true essence and nothing else, therefore, the process can be considered abstraction.

ESSENCE

CRUX
the decisive or most important point at issue.

QUITESSENCE
the essence of a thing in its purest and most concentrated form

CORE
the central, innermost, or most essential part of anything.

CHIEF
a leader or ruler, or the head of an organization; most important.

PROPERTIES
an attribute, quality, or characteristic of something.

CHARACTERISTIC
a feature or quality belonging serving to identify something.

ELEMENT
an essential or characteristic part of something abstract.

MODULE
independent units that can be used to construct a more complex structure.

SOUL
the principle of life, feeling, thought, and action in humans.

HEART
the central or innermost part of something; source of life.

EXTRACT
a constituent removed that possesses the special qualities in concentrated form.

EXTRICATE
free (someone or something) from a constraint or difficulty.

DISENTANGLE
to separate things that have become joined or confused.

LIBERATE
set (someone or something) free from early oppression.

FREE
remove something undesirable or restrictive from.

CONCENTRATE
gather (people or things) together in a common location.

STRONG
very intense, influential and powerful.

POTENT
someone or something having great power, influence, or effect.

CONCLUSION

OF KEYWORD

3.2 **ESSENCE**

Essence, the **extract** of an indivdual or an object. It is the **heart** of any given system and is depended upon by everything for life and character. It also acts as the **chief** governing aspect that is directive and **potent**; influencing and shaping any given outcome to reflect it's nature.

TYPES OF EXTRACT

RESEARCH RECAP:

ABSTRACTION

ESSENCE

the heart of any given system; having potent qualites that influence.

EXTRACT

a constituent removed that possesses the special qualities in concentrated form.

CONCLUSION

Extract can be applied in many areas. It involves the isolation and removal of what is valuable from any given system. This procedure can be non-physical but is more often a physical process.

By removing only what is of value, the process of extraction focuses on revealing the heart of the system.

Therefore, extraction is similar to abstraction as the focus is on gathering what is of true essence.

RESOURCE EXTRACTION

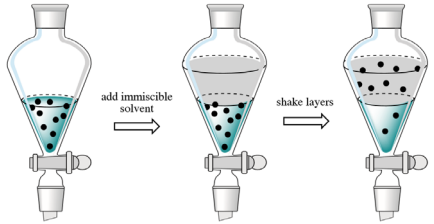
(Physical)

Resource extraction refers to activities that involve withdrawing useful materials from the natural environment. Some examples of natural resources include, fossil fuel, oil, wood and precious metals.

CHEMICAL EXTRACTION

(Physical)

Chemical extraction is a term commonly used to refer to a liquid-liquid extraction. Compounds move from one liquid to another depending on it's relative solubility. This process of moving across layers is considered "extraction".



BEVERAGE EXTRACTION

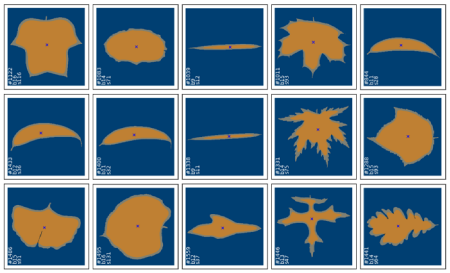
(Physical)

Beverage extraction is the process of dissolving solubles – desirable compounds – in water. In coffee, extraction occurs when ground coffee beans are mixed with water; solubles that may be extracted include caffeine, lipids, etc.

FORM EXTRACTION

(Physical)

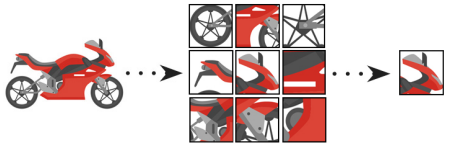
Form extraction is a process that extracts the form outline and the composite shapes from a subject. This is so that only the basic components remain, allowing analyst to record and capture the details with greater accuracy.



FEATURE EXTRACTION

(Physical)

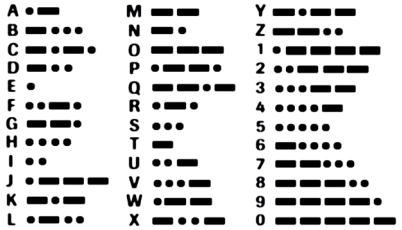
Feature extraction refers to a process of extruding and revealing only the most important or crucial aspects of a system. In the example below, the process seeks to extract the most distinctive/tell-tale part of the motorcyle.



CODE EXTRACTION

(Non-Physical)

Morse code is a method in telecommunication to encode text characters as standardized sequences called dots and dashes. In order to extract it's meaning (it's value), one first needs to understand it's process of decryption.



TYPES OF EXTRACT

RESEARCH RECAP:

ABSTRACTION

ESSENCE

the heart of any given system; having potent qualites that influence.

EXTRACT

a constituent removed that possesses the special qualities in concentrated form.

FEATURE EXTRACTION

extruding only the most distinctive aspects of a system.

CONCLUSION

Extract can be applied in many areas. It involves the isolation and removal of what is valuable from any given system. Feature extraction can be regarded as the extrusion of the most distinctive aspect of something. By extruding these key features, the end product is simple and minimal but still completely effective.

LOGO

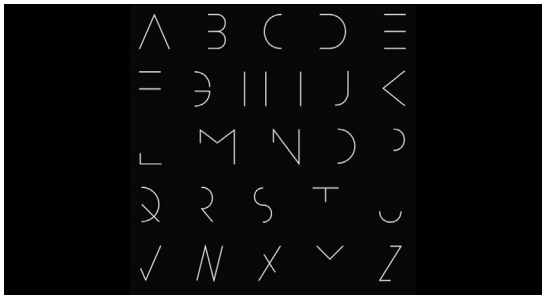
In the 21st century, logos are distinctive, graphical and simple in form. Many companies are radically changing the way their logos look, extracting the key aspects of old designs in the hopes of being more impressionable.

BEFORE

AFTER

TYPOGRAPHY

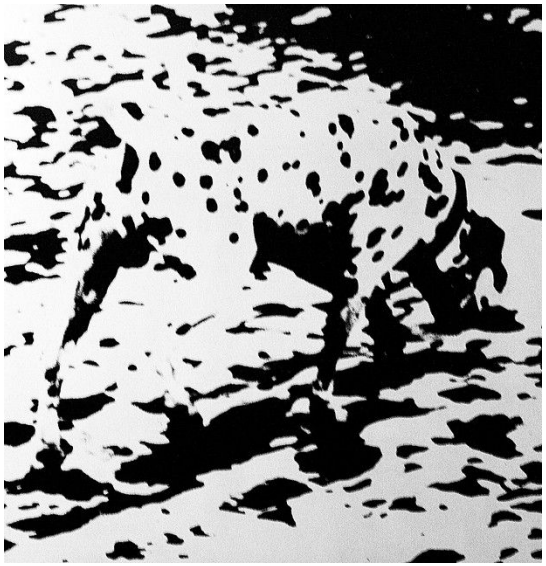
In typography, each font has it's own distinctive features. By extracting them, these fonts may be incomplete but are still completely legible.



GESTALT PRINCIPLES

Law of Closure

Base on the gestalt law of closure, viewers tend to ignore gaps and complete contour lines. Therefore, by carefully extracting only distinctive aspects, a subject can still be represented and seen, albeit the minimal features.



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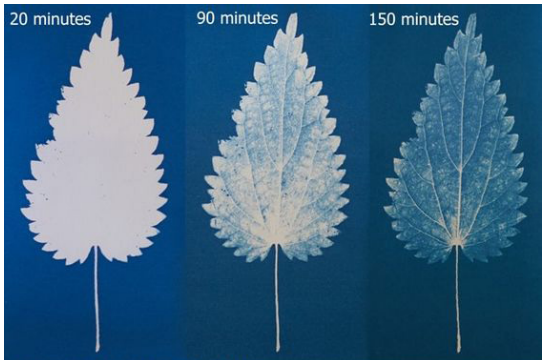
extruding only the most distinctive aspects of a system.

CONCLUSION

Extract can be applied in many areas. It involves the isolation and removal of what is valuable from any given system. Feature extraction can be regarded as the extrusion of the most distinctive aspects by layers; extracting what is most distinct first, and extracting what is least distinct last. In this case, feature extraction can be considered incremental as oppose to absolute.

CYANOTYPE

Cyanotype is a photographic printing process that produces a cyan-blue print when exposed to UV light and washed in water. Cyanotype extracts by layers, begining with the most distinctive feature of a subject (it's form) and ending with its least distinctive (it's details).

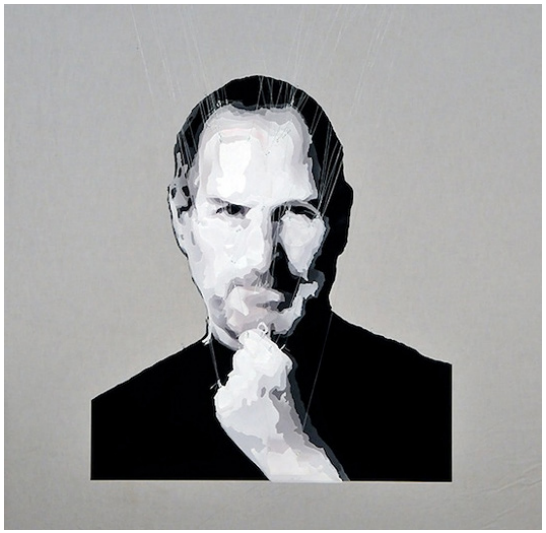


SPEED PAINTING

Speed painting is an artistic technique where the artist has a limited time to finish the work. As a result, the artists often extracts the most distinctive features of a subject (typically a person), and quickly paints it on a blank canvas; painting in layers to speed up the process.

MULTI LAYERED 3D SCULPTURE

Michael Murphy created a tribute to Steve Job through a series of dissected layers, forming a figure when viewed from the right angle. These layers are monochromatic extractions of Steve Jobs layered from darkest (form) to mid tones (shadows) and finally to lightest (highlights).



LINKING BACK

TO KEYWORDS

FEATURE EXTRACTION

We can apply extract in many areas. It involves the isolation and extrusion of what is valuable from any system. Feature extraction can be regarded as the extrusion of the most distinctive aspect of something. By extruding these key features, the end product is simple and minimal but still effective. However, Feature extraction can also be regarded as the extrusion of the most distinctive aspects by layers; extracting what is most distinct first and extracting what is least distinct last.

ESSENCE

We can consider it essence as the process involves extruding the “heart of the system”; here, distinctive features that provide life and character to the subject. Whether extraction happens in absolute or incremental terms, these features are chief governing aspects and are important in order for the end product to be identifiable.

ABSTRACTION

Extraction is a process of refinement as it involves isolating and extruding what is of value. In feature extraction, this means gathering the most distinctive aspects and showcasing them in a basic, minimal manner. Therefore, the process can be considered abstraction as it seeks to represent only what is essential and of true essence and not what is excessive or unnecessary.

CONCEPT BUILDING

OF KEYWORDS

KEYWORDS FROM MINDMAP

INSPIRATION FOUND

LINKING TO ABSTRACTION

FROM CONDENSE

CONDENSE IN SPACE

Condense in space is to reduce and shorten the space or distance between particles. An external force compresses particles together to make something more dense than before. A good example of this is the compression of gas particles via a syringe.

COMPLETELY CONDENSED

Being completely condensed is regarded as the absolute reduction of space between two subjects. These forms are compressed entirely; surpassing the “least possible state”. Superimposing or pleating are examples of this, where subjects not just in proximity but are overlapping one another.

CONDENSE THE UNNECESSARY

The process involves removing everything unnecessary and leaving behind only what is essential. When condense in space is taken to the extreme, the process focuses solely on revealing a subject’s major components, it’s true essence and nothing else, therefore, the process can be considered abstraction.

FROM EXTRACT

FEATURE EXTRACTION

In feature extraction, only the most distinct aspect is extruded and kept. These key features provide sufficient detail for us to make up what it is representing. In doing so, we need not present the entire subject to perceive; minimal yet effective.

EXTRACTED BY LAYERS

Extraction occurs in layers. Typically, the extrusion process begins with the most distinct, and ends with the least distinct. Here, extraction has a time element and is considered being incremental as oppose to an absolute onetime process.

PRIORITISE THE SIGNIFICANT

Extraction is a process of refinement as it involves isolating and extruding only what is of value. It conducts the process in stages, with priority given to the most significant aspects whereas it completely ignores the unimportant parts. The resulting end product, regardless of stage, should have telltale qualities of the subject it represents. Therefore, the process can be considered abstraction as it seeks to extract only what is of true essence and not what is excessive or unnecessary.

RE-CONCLUSION

OF KEYWORD

03 **ABSTRACTION**

Abstraction can be described as a process of refinement by completely condensing what is unnecessary and leaving behind only what is essential; major working components. Abstraction can also be described as the isolation and extrusion of distinctive aspects of a system and disregarding what is of no value.